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ABSTRACT

Incoming high school freshmen with a history of low achievement, discipline problems, and hostility towards school and society are characterized by poor self-image, frustration from encountering the regular academic program, an almost total inability to communicate, and no expectation that high school will bring educational success. The resulting need was for a special academic program that would make learning more meaningful, create an effective climate conducive to altering negative self-image, provide for positive rather than aversive reinforcement, and increase existing intellectual skills. Such a program was begun in the 1968-69 academic year at the Casa Grande, Arizona, Union High School. Students who were involved in the special program during the 1968-69 and 1969-70 academic years differed from their predecessors. Only nine and one-half percent dropped out of school compared to 20 percent in previous years. Absenteeism averaged only five percent among these youth compared to an average 12 to 15 percent among comparable youth. Minimal increase in intellectual skills was also demonstrated as most students showed a post-test increase on a test designed to measure potentiality in the areas of abstract reasoning, numerical ability, verbal ability, and language usage. (Authors/JM)

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Learning Relevancy: Psychological Analysis of an Experimental Program for Potential Minority Youth Dropouts[1]

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The question was encountered as to what to do with incoming high school freshmen who throughout their elementary school experiences were low achievers and discipline problems, and expressed hostile attitudes toward school and society. Several common identifiable traits were recognized among these youth, such as: (a) poor self-image, (b) frustration from encountering the regular academic program, (c) an almost total inability to communicate, and (d) a disillusionment that high school would be different from their unsuccessful elementary experiences (1). Such frustration often resulted in apathy or withdrawal, open defiance and aggression, or excessive absenteeism, which in many cases led to dropping out of school. The resultant concern was to develop a special academic program that would (1) make learning more meaningful, (2) create an effective climate conducive to altering negative self-image, (3) provide for positive rather than aversive reinforcement, and (4) increase existing intellectual skills.

Such a program was incepted in the 1968-69 academic year at the Casa Grande Arizona, Union High School. Interestingly enough, students

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who were involved in the special program during the 1968-69 and 1969-70 academic years showed different patterns of school-related behavior from their predecessors. Only 9.5 percent dropped out of school compared to 20 percent in previous years. This was also lower than the 12 percent dropout rate for the entire ninth grade. A marked decrease in absenteeism was also noticed. Absenteeism averaged only 5 percent among these youth compared to an average 12-15 percent among comparable youth. Minimal increase in intellectual skills was also demonstrated as most students showed a post-test increase on the Academic Promise Test, a test designed to measure potentiality in the areas of abstract reasoning, numerical ability, verbal ability, and language usage.

Special programming has demonstrated increased holding power, decreased absenteeism, and slight increases in intellectual skill. In most cases this could be attributed to individualizing instruction and making learning relevant to the particular minority youth cultures represented. One additional concern was considered during the 1970-71 academic year with these youth, namely, attitudes toward school and self. It was felt that an effective teaching-learning environment should produce attitude shift as well as the aforementioned changes.

Specifically 127 potential dropouts were selected to participate in a special academic or vocational program, which in addition to building various intellectual skills would also produce a more positive attitude shift. Selection criteria were: (a) scores on the Academic Promise Test, (b) academic grades through elementary school, (c) teacher recommendations, and (d) attendance (3). The breakdown according to academic

program and ethnic group is presented in Table 1. Most students came from the Mexican-American population. In addition, a considerable number of Indians and Blacks were included in the designated programs.

Most Mexican-American youth have grown up in the area, although approximately 30 percent of the families are migrant. They mainly live in Casa Grande. Families are characterized by intact parental relationships (68%). Fathers are relatively uneducated (58% have a 6th grade education or less) and have minimal occupational skills (48% are unskilled, another 35% skilled or semi-skilled). Most mothers stay at home (79% where they spend time with an average 6.2 children. These figures are summarized in Table 2.

In addition, Table 3 gives summary characteristics of school-related activities of the Mexican-American youth. Most students attended high school sport functions (88%) and slightly over half (56%) attended school dances. Considerably less were involved in school clubs (28%) although the school provided an extensive program for student participation in this area. In addition, 22 percent were involved in special activities, such as, sports, cheerleeding, band, chorus, class officers, etc. There was a noticeable trend toward participation in activities that require minimal commitment on the part of either the school or the students.

Most likely the Black students in the program are comparable to the Mexican-American students. They too attended high school sports often (93%) and attended high school dances (80%). In addition, 47 percent belonged to clubs, mainly the Afro-American Club. They were quite limited in special activities, as only 13% participated in them.

Table 1

An Analysis of Special Academic and Vocational Placed Students According to Ethnic Group

	Academic N=43		Vocational N=84		Total N=127	
Mexican-American	17	40	33	39	50	39
Anglo	13	30	27	32	39	31
Indian	7	16	16	19	23	18
Black	6	14	9	10	15	12

Table 2

Demographic Characteristics of Potential Dropout Youth Families According To Ethnic Group

	Mexican-American[1] (N=50)	Anglo (N=39)	Indian (N=23)	Black (N=15)
Parental Structure				
Mother-Father	34	32	13	7
Mother only	6	3	5	4
Father only	1	0	2	1
Step-Parent	2	4	2	2
Other relative	7	0	1	1
Family Size	6.2	5.0	5.5	8.2
Father's Education				
6th grade or less	25	2	3	4
7th-8th	7	6	4	3
9th-11th	7	3	3	1
High School Graduate	4	12	4	4
Some College	0	4	5	0
College Graduate	0	1	2	1
Mother's Education				
6th grade or less	18	2	5	2
7th-8th	17	2	7	4
9th-11th	10	11	4	4
High School Graduate	4	13	4	3
Some College	0	2	1	1
College Graduate	0	1	0	1
Father's Occupation				
Professional	1	1	0	0
Managerial	1	12	2	0
Small Business	2	1	1	1
Clerical	0	0	0	0
Skilled	14	8	10	5
Semi-skilled	1	2	1	2
Unskilled	20	8	4	5
Unemployed	3	0	1	2
Mother Works				
Yes	10	17	7	5
No	39	18	14	9

[1]These N's represent the possible total in each category, although in some cases not all subjects responded.

Table 3

Participation in School-Related Activities by Potential Dropouts as Compared to Students in the Regular Classroom

	Mexican-American (N=50)[2]	Anglo (N=39)	Indian (N=23)	Black (N=15)	Dropout Total (N=127) N	%	Control[1] Group (N=127) N	%
Attend Athletic Events								
Yes	43	28	14	14	99	82.5	92	77.3
No	6	5	9	1	21	17.5	27	22.7
Attend High School Dances								
Yes	27	22	4	12	65	53.7	56	47.1
No	21	13	19	3	56	46.3	63	52.9
Belong to School Club								
Yes	13	14	11	7	45	37.5	60	48.4
No	34	21	12	8	75	62.5	64	51.6
Participate in Special Activities								
Yes	10	16	5	2	33	27.7	34	29.6
No	36	19	18	13	86	72.3	81	70.4

[1]This group consisted of 24 Mexican-American, 78 Anglo, 20 Indian, and 5 Black students.

[2]These N's represent the possible total in each category, although in some cases not all subjects responded.

The Indian sample comes primarily from Papago and Pima Indians, most of which are reservation Indians, although some live in the city of Casa Grande. The majority of these youth (61%) went to high school sport activities. Considerably less attended school dances (17%). Slightly under half (48%) belonged to clubs and only 21 percent participated in special activities.

It has often been posited that Anglo students have advantages within a school that minority youth do not. If this is the case, the behavior of Anglo students at Casa Grande does not reflect exercise of such choices. Of the students in these classes 85 percent attended athletic events while 63 percent participated in school dances. These percentages do not reflect significant differences between Anglo students and the three minority student groups. In addition, only 40 percent belonged to clubs. If any distinguishable differences were apparent it was most likely in the area of special activities where we found 46 percent participation. This was much higher than the percentages for the Mexican-American, Indian, and Black students.

Table 3 also compares the school-related activities of the total potential dropout group with the control group. The most noticeable difference regards belong to school clubs in which control group membership was 48.4 percent compared to dropout group membership of 37.5 percent. In the other three areas differences were not as marked and in one case favored the potential dropout group. If one were to look at a lack of participation in school-related and school-coordinated

activities as a potential cause of dropping out of school, data gathered in this study would not support such a hypothesis.

There are decisive differences in intelligence, however. Potential dropouts had much lower scores on both the Verbal and Non-verbal sections of the Lorge-Thorndike Intelligence Scale than did the control group or the entire 9th grade population. As can be seen in Table 4, the potential dropouts had intelligence quotients of 85 compared to the school norm of 97 on the verbal scale. Similarly, the special academic class non-verbal score of 89 and the vocational class non-verbal score of 93 was much lower than the total school non-verbal score of 103.5. It is likely that intelligence factors are a contributory cause to potential dropouts which may be evidenced by years of unsuccessful academic experiences.

As previously stated, a major evaluation objective in the 1970-71 special classes was to assess attitude toward self and school. Attitude toward self was measured with the special academic class and the vocational class by using the Tennessee Self-Concept Scale, a 100-item scale containing self-descriptive statements which the subject uses to portray his own perception of himself. The scale is self-administering and can be used with subjects 12 years or older (2).

The scale is broken into several subscales. Three of these scales are of special concern here. First is the Self-Criticism Score. This scale includes mildly derogatory statements that most people admit as being true for them. Denial of such items indicates defensiveness. High scores generally indicate a normal, healthy capacity for self-

Table 4

Intelligence Scores of all Freshmen in Casa Grande High School on the Lorge-Thorndike Intelligence Scale

	Verbal		Non-verbal	
	Mean	S.D.	Mean	S.D.
National Norms	100	15	100	15
Total School (N=441)	97.6	15.5	103.5	14.8
Control Group (N=127)	96.6	12.4	100.8	3.4
Vocational Class (N=84)	85.7	10.2	93.4	11.5
Special Academic Class (N=43)	85.3	9.7	89.0	12.8

criticism. Low scores indicate defensiveness and may distort the results of the entire test. The students in the special academic group had a T-score of 47.4 on this subscale and the vocational students had a T-score of 46.2. Both approximate the mean it appears that there is no apparent defensiveness among these youth (see Table 5).

The second scale discussed here is the Positive Score. This is the single most important score on the test and reflects the overall level of self-esteem. Items on this subscale focus around (a) What I am, (b) How I feel about myself, and (c) What I do. Scores on this subscale were considerably lower. The T-score derived on the special academic group was 38.5 which falls at the 12th percentile. The vocational positive score was comparable, being 38.9. Such scores indicate a lack of personal feeling of value and worth, lack of confidence in one's self, and a personal dislike for one's self.

The third scale reported here is the Distribution Score. This is a summary of the way one distributes his answers across the five available choices in responding to the items on the Total Scale. High scores indicate that the subject is very definite and certain in what he says about himself, while low scores mean the opposite. The T-score for the special academic group was 43.8 and for the vocational group 45.8. These scores reflect a nominal amount of definiteness, although one could question the validity of responses on those individual students who fell much below the mean.

As an attitudinal measure, the Tennessee Self-Concept Scale can only provide us with fragmentary evidence. We are able to conclude from the results found in Table 5 that students designated as potential

Table 5

A Comparison of Self-Concept of Potential Dropouts in Special Academic and Vocational Classes as Measured by the Tennessee Self-Concept Scale[1]

	Special Academic Class (N=43)		Vocational Class (N=84)	
	Mean	S.D.	Mean	S.D.
Self-Criticism	47.4	8.3	46.2	8.6
Total Positive	38.5	10.1	38.9	9.9
Identity	37.2	12.7	37.4	11.7
Self-Satisfaction	44.1	9.9	44.0	10.4
Behavior	37.5	9.3	37.8	10.4
Physical Self	42.8	11.0	43.8	10.8
Moral-Ethical Self	36.4	12.7	36.2	9.9
Personal Self	45.4	13.5	45.0	12.8
Family Self	36.0	11.2	39.2	11.0
Social Self	41.4	11.9	39.4	9.8
Distribution Score (D)	43.8	11.8	45.8	12.1

[1]National norms on all subscales are M = 50, S.D. = 10

dropouts, whether placed in a special academic or vocational group have comparable self-concepts. self-concepts. Perhaps it is the measure of attitudes toward school that will tell us how special programs will be effective in maintaining students.

The Pupil Opinion Questionnaire is a 30-item attitude scale, scored on a modified Likert scale which tests attitudes toward school. All ninth grade students were given this scale and a total mean of 79.9 was derived. When the special academic group and vocational group were sorted out, means were not significantly different. The means of these two groups respectively were 78.0 and 77.5. As in the case of the Tennessee Self-Concept Scale, we cannot conclude any measurable attitudinal difference in school of potential dropouts when given the test on a pre-test (September) basis. It has been hypothesized that differences will exist as an effect of special programs, as determined by an alternate form of the Pupil Opinion Questionnaire given on a post-test basis.

What is being done?

When one looks at the (a) school records of these youth, (b) the personal and family characteristics of these youth, and (c) individual differences through standardized testing of these youth, the question of how to effectively create a teaching-learning environment which will take into account such differences becomes monumental. Therefore, three objectives were the guidelines for setting up the program: (1) keeping these youth in school; (2) increasing minimal intellectual skills, and

(3) changing the negative self-images held by these youth.

Specially trained teachers were sought. It was felt that teachers working with this type of youth must be aware of student problems and needs and be able to identify them. Another strong factor was the teacher's interest in working with these youth. It was decided that team teaching might be to the best advantage of the program. Having two teachers increased a student's chances of finding an adult with which he can identify and communicate. The team teaching block would give the team greater flexibility in adapting teaching strategies to the students' interest level. In addition, it would permit time for experiments, guest speakers, special projects, and field trips--all important to relevancy within the program.

Since math and English seemed to account for most failures, these courses were selected for the team teaching block. Simply teaching the subjects in the traditional way would be futile. The subject matter had to be made relevant to the students. This was often demonstrated by boys figuring out how much interest they might have to pay on purchasing a car or in girls who often had to double or triple recipes in order to feed their large families. Within the team situation students were grouped according to their ability in math and their interest in English. As abilities and interests changed, students were allowed to move from one interest area to another. Different forms of individualized and independent study were tried, and gaming and role playing were used with much success. Field trips allowed utilization of community resources.

One rewarding unit in English involved Classics Illustrated comic books. The students' appreciation and enjoyment of literature, presented

in a form they could read, and their increasing ability to grasp and express literary themes proved quite gratifying. While the students might not be absorbing the difference between romanticism and naturalism, they were learning to understand and cope with the world. Many were learning, for the first time, that they could learn and did not have to be baffled by incomprehensible subject matter.

The results which seem most promising to the teachers working with these students are not easily measured by standardized tests. There have been changes in attitudes and feelings. Once sullen and uncooperative students have shown more eagerness and enthusiasm, have become involved in school activities, and shown more happiness. Increasing respect for self and others has been noticed.

Perhaps the attitudinal shift within the special academic class is most attributable to the psychological principles being used by the teachers. Since these youth have been accustomed to years of unsuccessful experiences, they have been given experiences they could handle and achieve. By reducing the number of unsuccessful experiences, and finding ways to help students learn in deficient areas without telling them they are wrong, teachers have noticed an increasing desire to learn among these youth. The program is not static, however. Analysis of what is being done, and how it might be improved is constantly occurring.

It is gratifying that most students who participated in the original 1968-69 project are still in school. Only 20 percent have dropped out. Similarly 83.3 percent of the 1969-70 students are still in school. Of the 43 students in the special program during 1970-71

40 finished school. These statistics compare favorably with the 4-year loss rate of 50 percent at Casa Grande.

Through administering the Tennessee Self-Concept Scale and the Pupil Opinion Questionnaire we have been able to isolate several characteristics of these potential dropouts which will better allow us to meet the special needs of students. By giving post-tests on both attitudinal measures, we will be able to measure change scores in the special academic class, vocational class, and the regular classroom. In addition, these youth will be followed through the 1971-72 year in an attempt to determine the effectiveness of special academic and vocational programming on (a) holding power and (b) attitude toward self and school of these youth over a two-year time block.

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